

Abstract

[0038] A constant velocity joint has an outer part, an inner part, a plurality of torque transmitting balls, and a cage having windows for retaining the balls in the ball tracks of the outer and inner parts. The balls are retained in a constant velocity plane by the cage and guided by corresponding pairs of outer and inner ball tracks. The cage has an outer spherical face guided in contact by an inner bore of the outer part and inner concave face rotatably guided in contact by the convex face of the inner part. The outer part having a normal axial range, an extended axial range, and at least one energy absorption surfaces located in the extended axial range. Wherein the energy absorption surface interferes with at least one of the torque transmitting balls when the joint is operated beyond said normal axial range.